Volume 4 Issue 1

Spring 2004

Disease Detectives

Communicable Disease Control UPDATE

MECKLENBURG COUNTY HEALTH DEPARTMENT
A Quarterly Publication

Did you know...

...North Carolina law requires physicians to:

⇒ Notify the local health department if a patient has a reportable disease. Initial report shall be made by telephone if the disease is reportable within 24 hours. After reporting by telephone, complete a N.C. Communicable Disease Report Card (see page 4) and mail to the local health department.

⇒ Inform patients who are HIV positive about the control measures listed in the state law.

⇒ Notify public health authority if a physician suspects an HIV positive patient is not following control measures.

⇒ Notify public health authority when the identity of the spouse of an HIV positive patient is known and the spouse has not been notified and counseled by the physician.

⇒ Notify the local health director when a child who is infected with HIV or hepatitis B poses a significant risk of transmission in the school or day care setting because of open, oozing wounds or because of behavioral issues such as biting.

⇒ Advise patients known to be at high risk for hepatitis B to receive the hepatitis B vaccine series (high risk patients include injection drug users, men who have sex with men, hemodialysis patients, and patients who receive multiple transfusions of blood products).

⇒ Advise hepatitis B carriers that they should receive hepatitis A vaccine (if susceptible).

⇒ Notify the State Health Director if infected with HIV or hepatitis B and are performing surgical, obstetrical, or invasive dental procedures.

⇒ Test pregnant women for hepatitis B unless they are known to be infected.

⇒ After pre-test counseling and consent, test pregnant women for HIV (patient can refuse test).

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For more information, contact Jane Hoffman at hofflj@co.mecklenburg.nc.us or 704.336.5490. To obtain N.C. Communicable Disease Report Cards, call 704.336.2817. Who should you call to report communicable diseases? See page 5.

Reference

North Carolina General Statute 130A, Article 6, "Communicable Diseases" (www.ncga.state.nc.us)

LEPTOSPIROSIS: A GROWING DANGER

Potentially fatal for both humans and their pet animals, Leptospirosis is currently being diagnosed by veterinarians in alarming numbers of cases. The species *Leptospiria interrogans* has been classified into subtypes called serovars with more than 200 seen worldwide. In eastern United States, *grippotyphosa,* a common serovar, along with *canicola* are being recovered by serology from dog and rodent pets after presenting at veterinary hospitals with anorexia, vomiting, lethargy, depression, diarrhea, and bloody urine. Most of these pet animals have recently come into contact with an infected host (rats and other small mammals). The organism spreads through the bloodstream leading to fever and joint pain, usually lasting four to seven days. The organism may then settle in the kidney tubules leading to inflammation and may cause kidney failure. Some serovars target the liver and can lead to severe jaundice, necrosis, and organ dysfunction or failure. Animals are supported with fluids, penicillin is used to stop Leptospire reproduction in the bloodstream, and tetracycline is used to clean Leptospires from the kidneys.

While there are vaccines that can protect animals against serovars *canicola, grippotyposa, pomana, and icterohaemorrhagiae,* not all serovars are vaccine-preventable and the protection of one shot is not effective for the other 196-plus serovars. With summer approaching, the risk for contracting Leptospirosis increases when dogs are more likely to drink from water puddles, ponds, water fountains, and other sources where rodents can leave the organism behind. Ask your veterinarian if your animals need this protection.

The disease can be equally dangerous for humans. Clinical illness can last from several days to three weeks or longer. Recovery of untreated cases can take several months. Most people will acquire the disease from contact with their pets' urine. Spirochetes are readily passed when dogs, rodents, and other mammals leave their urine in water and on environmental surfaces. Contact with abraded skin or transfer by hand to nose, mouth, or eyes completes the cycle of spread. Animal owners, veterinarians, and others who are exposed to Leptospirosis should see their physician for blood testing (by microscopic agglutination or Polymerase Chain Reaction). Acute and convalescent serum should be obtained. Diagnosis is confirmed when the convalescent serum shows a fourfold increase in antibody titer. Treatment includes penicillin, cephalosporins, doxycycline, and erythromycin. Humans who are exposed to Leptospirosis but who are not showing symptoms, can be prophylaxed with high doses of doxycycline given once weekly during periods of exposure.

For more information, contact Al Piercy at piercaw@co.mecklenburg.nc.us or 704.336.6440.

How to protect yourself from Leptospirosis:

- **Keep your pet away from rats, mice, and small mammals.**
- **Ask your veterinarian about vaccinating your pet against Leptospirosis.**
- **Wear protective gloves and boots when handling pet urine or feces.**
- **Take pet to your veterinarian if illness is present.**
- **Use antibacterial solution such as one part household bleach to ten parts water to clean up animal urine and feces.**
- **If your pet does become infected, follow your veterinarian's instruction on all medications and follow-up with a return visit to your veterinarian.**

This periodical is written and distributed quarterly by the Communicable Disease Control Program of the Mecklenburg County Health Department for the purpose of updating the medical community in the activities of Communicable Disease Control. Program members include: Health Director—Peter Safir; Medical Director—Dr. Stephen R. Keener; Health, Environmental Health Administrator—Bobby Cobb; Director, CD Control—Carmel Clements; Program Chief–Wanda Locklear; CD Control nurses—Shannon Gilbert, Nancy Hill, Jane Hoffman, Lorraine Houser, Monica O'Lenic, Elizabeth Quinn; TB Outreach nurses—Marcia Frechette (also Adult Day Health), Faye Lilieholm; Child Care nurse—Gail Mills; Rabies/Zoonosis Control—Al Piercy; Program Chief STD/HIV Surveillance—Carlos McCoy; Syphilis Coordinator— Ann White; DIS—Mary Ann Curtis, Michael Rogers, Lavon Sessoms; Regional Surveillance Team—Bobby Kennedy, Belinda Worsham; Office Assistants—Vivian Brown, Linda Kalman, Lisa Liner.

Lorraine Houser
Editor

Syphilis Elimination Project/ICEE

The Health Department's Syphilis Elimination Project conducted its first community outreach program on March 27, 2004. This community outreach program, **Intensive Community Education Effort (ICEE),** was held from 9:00 AM - 2:00 PM throughout the Charlotte area. Volunteers provided residents with information on all sexually transmitted diseases and offered free, confidential, on-the-spot testing for Syphilis and HIV. The ICEE event targeted communities with the highest number of Syphilis and HIV/AIDS cases. In Mecklenburg County, the number of Syphilis cases are declining but the number of HIV cases are on the rise.

In an effort to eliminate Syphilis from Mecklenburg County by 2005, the Syphilis Elimination Task Force became proactive in designing a way to educate the public about sexually transmitted diseases and providing non-traditional testing for Syphilis and HIV on weekends. The media committee of the task force provided strategically specific messages about the ICEE through popular radio stations, newspapers, magazines, TV interviews, public service announcements, and flyers. Each media message was presented in English and Spanish.

Volunteers for the ICEE consisted of the Syphilis Elimination Task Force, Community Based Organizations (CBO's), Mecklenburg County Health Department, North Carolina Prevention and Care Branch, and other community residents. Teams of 4—5 volunteers consisting of STD counselors, phlebotomists, administrative recorders and Spanish interpreters tested 116 people for Syphilis and/or HIV, far exceeding our goal of testing 65 people. Test results are still pending at this time, but our targeted high-risk population was reached.

Ann C. White, Syphilis Coordinator

The Syphilis Elimination Task Force is planning another ICEE event for mid-July 2004. We will continue to analyze and monitor surveillance data in a effort to reach the overall goal of completely eliminating Syphilis from Mecklenburg County by 2005.

For more information, contact Ann C. White at whiteac@co.mecklenburg.nc.us or 704.432.1506.

	Totals	Percent	Black	Percent	White	Percent	Hispanic	Percent
Male	**83**	**72%**	**55**	**48%**	**5**	**4%**	**23**	**20%**
Female	**33**	**28%**	**19**	**16%**	**2**	**2%**	**12**	**10%**
Totals	**116**	**100%**	**74**	**64%**	**7**	**6%**	**35**	**30%**

FAQ

Q. Is HIV and AIDS still reportable to the Health Department even with the new HIPAA laws?

A. Yes! HIPAA does not affect the reporting of communicable diseases to the Health Department. All demographic and laboratory information can be released to the Health Department without having the patient sign a "Release of Information". Laboratories and physicians are required to report those diseases listed on the back of the North Carolina Communicable Disease Report Card (see page 4) within 24 hours (by telephone) or 7 days (by mail or telephone) as indicated on the Report Card.

N.C. Communicable Disease Report Card

FOR STD ONLY: ☐ VOL. ☐ EPI. ☐ SCREEN

N.C. Department of Health and Human Services – Division of Public Health

NORTH CAROLINA COMMUNICABLE DISEASE REPORT CARD

USE FOR ALL REPORTABLE DISEASES EXCEPT CANCER—REPORT ONLY ONE DISEASE PER CARD

Patient's Name: Last / First / Middle/Maiden | Sex ☐ M ☐ F | SSN

Date of Report ___/___/___ | Date of Onset ___/___/___ | Was this Disease Fatal? ☐ Yes ☐ No | Hospitalized For this Disease? ☐ Yes ☐ No

ENTER CODE FOR DISEASE REPORTED (see other side)

Race: ☐ White ☐ Black ☐ American Indian or Alaska Native ☐ Asian or Pacific Islander

Ethnic Origin: ☐ Hispanic ☐ Non-Hispanic

Patient's Address: Street or RFD No. | Phone ___/___-___

City | Zip | County

Birthdate ___/___/___ | Age ___Years OR ___Months | Site of Care: ☐ Active Military ☐ Public ☐ Private

Location Where Acquired *(if other than county of residence)* ☐ SAME

*Required Information for Codes 6, 9, 13, 23, 25, 27, 38, 54, 55, 58, 61, 68, 200, TB:

Causative Organism: ___
[Encephalitis, arboviral (9), Other Foodborne Disease (13), Viral Hemorrhagic Fever (68)]

Serotype: ___
[Vibrio cholera (6), Hemophilus influenzae (23), Meningitis, Pneumococcal (25), Meningococcus (27), Salmonella (38), Vibrio, other (55)]

Site of Infection: ___
[Hemophilus influenzae (23), Meningococcus (27), Vibrio vulnificus (54), "VRE" (58), Group A Strep. (61), Chlamydia (200), Tuberculosis (TB)]

COMMENTS:

Patient is: ☐ Child or Worker in Day Care ☐ Parent of Child in Day Care ☐ Foodhandler ☐ Health Care Worker ☐ None of Above

State/LHD Use Only: outbreak related: ☐ no ☐ yes; specify:

Parent or Guardian *(of minors)*

Reported By *(Full Name and Title)*

Agency and Address

Attending Physician *(if not individual reporting case)*

Address | Phone ___/___-___

Surveillance Form ☐ Completed ☐ Not Required | Case Investigation No.

Local Health Director's Signature or Stamp | Clinic No.

DHHS 2124 (Revised 7/03) EPIDEMIOLOGY

Back

Surveillance Form Required

PLEASE ENTER CODE NUMBER IN BLOCK ON FRONT OF CARD

*Add'l Information Required on Other Side of Card

CDC BIOTERRORISM - CATEGORY A

REPORT IMMEDIATELY TO LOCAL HEALTH DEPARTMENT

ANTHRAX	3
BOTULISM	10
PLAGUE	29
SMALLPOX	69
TULAREMIA	43
VIRAL HEMORRHAGIC FEVER	*68

OTHER REPORTABLE COMMUNICABLE DISEASES

ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS)	950
BRUCELLOSIS	5
CAMPYLOBACTER INFECTION	*50*
CHOLERA	*6*
TRANSMISSIBLE SPONGIFORM ENCEPHALOPATHIES (CJD/vCJD)	66
CRYPTOSPORIDIOSIS	*56*
CYCLOSPORIASIS	*63*
DENGUE	7
DIPHTHERIA	*8*

OTHER REPORTABLE COMMUNICABLE DISEASES (continued)

E. COLI, SHIGA TOXIN-PRODUCING INFECTION (including E.coli O157:H7)	*53*
EHRLICHIOSIS, GRANULOCYTIC	571
EHRLICHIOSIS, MONOCYTIC (E.chaffeensis)	572
ENCEPHALITIS, ARBOVIRAL (CAL, EEE, WNV, OTHER)	*9
ENTEROCOCCI, Vancomycin-resistant ("VRE"), from normally sterile site	*58
FOODBORNE DISEASE: C. perfringens	*11*
STAPHYLOCOCCAL	*12*
OTHER or UNKNOWN	*13*
HANTAVIRUS INFECTION	67
HEMOLYTIC UREMIC SYNDROME	*59*
HEMOPHILUS INFLUENZAE, INVASIVE DISEASE	*23*
HEPATITIS A	*14*
HEPATITIS B, ACUTE	*15*
HEPATITIS B CARRIER	115
HEPATITIS B, PERINATAL	*116*
HEPATITIS C, ACUTE	60
HIV INFECTION	900
LEGIONELLOSIS	18
LEPTOSPIROSIS	20
LISTERIOSIS	*64*
LYME DISEASE	51
MALARIA	21
MEASLES	*22*
MENINGITIS, PNEUMOCOCCAL	*25
MENINGOCOCCAL DISEASE	*27*
MONKEYPOX	*72*
MUMPS	28
POLIO, PARALYTIC	*30*
PSITTACOSIS	31
Q FEVER	32
RABIES, HUMAN	*33*
ROCKY MOUNTAIN SPOTTED FEVER	35
RUBELLA	*36*
RUBELLA CONGENITAL SYNDROME	37
SALMONELLOSIS	*38*
S.A.R.S. (Coronavirus infection)	*71*
SHIGELLOSIS	*39*
STREPTOCOCCAL INFECTION, GROUP A, INVASIVE DISEASE	*61
TETANUS	40
TOXIC SHOCK SYNDROME	41
TOXIC SHOCK SYN., STREPTOCOCCAL	65
TOXOPLASMOSIS, CONGENITAL	62
TRICHINOSIS	42
TUBERCULOSIS	*TB*
TYPHOID, ACUTE	*44*
TYPHOID CARRIER	144
TYPHUS, EPIDEMIC (louse-borne)	46
VACCINIA	*70*
VIBRIO INFECTION, OTHER	*55*
VIBRIO VULNIFICUS	*54*
WHOOPING COUGH (PERTUSSIS)	*47*
YELLOW FEVER	48

SEXUALLY TRANSMITTED DISEASES

REPORT WITHIN 24 HOURS

SYPHILIS	
PRIMARY (lesion present)	210
SECONDARY (skin or mucosal lesions)	220
EARLY LATENT (< 1 yr)	230
LATENT, UNKNOWN DURATION	240
LATE LATENT (> 1 yr)	245
LATE WITH SYMPTOMS	250
NEUROSYPHILIS	260
CONGENITAL	290
GONORRHEA	
GENITO-URINARY (non-PID)	300
OPHTHALMIA NEONATORUM	345
CHANCROID	100
GRANULOMA INGUINALE	500

OTHER STDs — *REPORT WITHIN 7 DAYS*

CHLAMYDIA – Lab confirmed	*200
LYMPHOGRANULOMA VENEREUM	600
Other than lab-confirmed CHLAMYDIA: NONGONOCOCCAL URETHRITIS (NGU)	400
PELVIC INFLAMMATORY DISEASE	490

Report within 24 hours for diseases in ***Bold Italics***, and 7 days for all other diseases.

To obtain N.C. Communicable Disease Report Cards, contact Lisa Liner at 704.336.2817 or contact any of the Communicable Disease Staff listed on page 5.

Reporting Communicable Diseases – Mecklenburg County

To request N.C. Communicable Disease Report Cards, telephone 704.336.2817

Mark all correspondence "CONFIDENTIAL"

Tuberculosis:

TB Clinic 704.432.2490
Mecklenburg County Health Department FAX 704.432.2493
2845 Beatties Ford Road
Charlotte, NC 28216

Sexually Transmitted Diseases, HIV, & AIDS:

Regional Office HIV/STD Surveillance 704.336.6480
Mecklenburg County Health Department FAX 704.336.6200
700 N. Tryon Street, Suite 214
Charlotte, NC 28202

All Other Reportable Communicable Diseases including Viral Hepatitis A, B & C:

Report to any of the following nurses:

Shannon Gilbert, RN 704.353.1270
Nancy Hill, RN, 704.336.5498
Jane Hoffman, RN, 704.336.5490
Lorraine Houser, RN 704.336.6438
Monica O'Lenic, RN 704.336.6436
Elizabeth Quinn, RN 704.336.5398
Communicable Disease Control FAX 704.353.1202
Mecklenburg County Health Department
700 N. Tryon Street, Suite 271
Charlotte, NC 28202

Animal Bite Consultation / Zoonoses / Rabies Prevention:

Al Piercy, RS 704.336.6440
Communicable Disease Control FAX 704.353.1202
Mecklenburg County Health Department
700 N. Tryon Street, Suite 272
Charlotte, NC 28202
or State Veterinarian, Lee Hunter, DVM 919.733.3410
State after hours 919.733.3419

Child Daycare Nurse Consultant:

Gail Mills, RN 704.336.5076
Communicable Disease Control FAX 704.353.1202
Mecklenburg County Health Department
700 N. Tryon Street, Suite 271
Charlotte, NC 28202

Suspected Food borne Outbreaks / Restaurant, Lodging, Pool and Institutional Sanitation:

Food & Facilities Sanitation 704.336.5100
Mecklenburg County Health Department FAX 704.336.5306
700 N. Tryon Street, Suite 208
Charlotte, NC 28202

Mecklenburg County Health Department

Consistent Provider Reporting = Varying Trends & High Case Rates

In 2003, Mecklenburg County experienced varied trends in Syphilis and HIV/AIDS case reporting. For the third year in a row, Mecklenburg's Syphilis rates have declined for both symptomatic and non-symptomatic cases of less than one years' duration to a total of 42. In direct contrast, Mecklenburg's HIV/AIDS case reports have increased from the previous three years' total to the current total of 437.

These varying differences can be attributed historically to the cyclical changes in the disease landscape for sexually transmitted infections. Specifically, the Syphilis Elimination Program's increased screening and educational opportunities have contributed to the decreasing rates over the past several years. In comparison, the efforts of Mecklenburg's public and private providers have contributed to the increased awareness of HIV & AIDS in our communities by identifying and testing at-risk clients and reporting significantly large numbers of new HIV and AIDS cases. This is in addition, to the follow-up of our disease intervention specialists who promptly attempt to locate these new infections in the field for interviewing, partner notification and disease intervention opportunities.

Specifically, the two Mecklenburg County Health Department (MCHD) clinic locations and Carolina Medical Center's (CMC) Emergency and OB/GYN Departments have contributed excellent Syphilis case reporting. Also consistently reporting large numbers of new HIV and AIDS cases are Presbyterian Hospital, and a number of infectious disease clinics. These include Jemsek, ID Consultants, and CMC ID clinic. Our reporting successes have been an ongoing collaboration with both public and private providers. Over the years, the Mecklenburg County Surveillance teams' collaborations have included numerous in-services, morbidity and statistical updates, provision and technical assistance of reporting mechanisms, data sharing, and a overall explanation of our disease intervention activities and policies.

The diligent and hard work of the County's public and private providers and the Mecklenburg County Health Department staff have built a solid infrastructure. This foundation places the County in a position to effectively combat the challenge of HIV/AIDS and further reduce Syphilis rates in our communities.

For questions concerning reporting of new cases, in-services, statistical updates, or general inquiries, contact Mike Mercurio at michael.mercurio@ncmail.net, or 704.336.7577.

"Mecklenburg's HIV/AIDS case reports have increased from the previous 3 years' total to the current total of 437."

Attention: Pediatricians and Family Practitioners
Required SIDS Training under way for Child Care Providers
Child Care Law requires Physician waivers for sleep position other than back

The Health Department's Child Care Nurse program is currently in the process of providing training to infant caregivers from child care centers and family child care homes. Effective December 1, 2003, House Bill 152 was passed which focused on "Reducing the Risk of Sudden Infant Death Syndrome (SIDS) in Child Care". This bill applies to all child care providers caring for babies 12 months of age or younger and is intended to reduce SIDS risk factors in child care facilities. Licensed facilities who care for infants, and any provider scheduled to work in the infant room is required to complete ITS- SIDS (Infant/Toddler Safe Sleep and SIDS) training by certified trainers. According to Child Care Rule 10 A NCAC 09 .0606, .1724 *New Safe Sleep Policies…. A center or home that is licensed to care for infants must develop and adopt a written safe sleep policy that states: All infants will be placed on their backs for sleeping. For infants six months old and younger, a written waiver from a health care provider stating another sleep position is allowed. For infants older than six months, a written waiver from a health care provider or parent is allowed.* If there is a valid health reason why a baby should not sleep on the back, the parents should inform the child care provider and give them a statement from the baby's doctor. Parents should obtain a written statement from the baby's doctor that states the *medical* reason why the baby is exempt from sleeping on his or her back. Waiver forms are available at www.meckhealth.org/. Follow the links to Programs & Services/Communicable Disease Follow-up/Childcare Nurse Program. If you have any questions, contact Gail Mills at millsgb@co.mecklenburg.nc.us or 704.336.5076.

WEST NILE VIRUS- 2004

West Nile virus (WNV) first appeared in the U.S. in 1999 in the New York City area and has spread to 46 states in the continental U.S. The virus is transmitted primarily by the bite of an infected mosquito. The natural animal reservoir is various species of birds. Disease symptoms in an infected person or animal have ranged from none to severe neurological damage to death. In the U.S., the virus has caused mild to severe forms of disease in humans, horses, and birds. Although other animals (dogs, bats, rabbits, squirrels, frogs, etc.) have been infected with the virus, WNV disease in these animals is rare.

In the U.S., the virus has been isolated in over 140 different species of birds and more than 40 different species of mosquitoes. Most bird groups do not appear to develop substantial levels of viremia or disease. However, the group containing bluejays and American crows can show high levels of virus, substantial disease, and death. The virus also appears to have higher impact on raptors such as hawks and owls. Horses are particularly at risk to developing encephalitis-like conditions and death. Estimates of up to 40% mortality have been published for horses infected with WNV.

Fortunately, humans are substantially less inclined to develop disease. It is estimated that only 1 in 5 persons exposed to the virus will develop any symptoms of disease and most of those will be mild. Mild symptoms or West Nile *fever* include fever, headache, body ache, nausea, vomiting, swollen lymph glands, or skin rash on the chest, stomach and back. Symptoms typically last a few days. About 1 in 150 people infected with WNV will develop severe illness with symptoms including high fever, headache, stiff neck, disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness and paralysis. These symptoms may last several weeks, and neurological effects may be permanent. Deaths in humans occur at a rate of about 8% of those developing the more severe form of the disease.

Nationwide in 2003, over 9,800 human cases of WNV-associated disease were reported. Of these cases, 69% were classified as the milder WNV fever, 29% were classified as the more severe neurological illness, WNV encephalitis, and the remaining 2% were unspecified. Total number of reported human deaths from WNV in 2003 was 262. Although transmission of the disease is primarily by mosquitoes biting infected birds and then biting humans, horses, etc., other rare transmission routes have been identified. Human cases associated with needle sticks, blood transfusions, organ transplants, and pregnancy have been identified over the last 2 years. In Mecklenburg, 3 people were identified with WNV *fever* in 2003.

In past years, surveillance for the virus has been accomplished by the collecting and testing of targeted wild birds and mosquito species and the testing of sera/blood of sentinel chickens. A total of 19 birds were found *positive* for West Nile virus in 2003 and 62 in 2002. Only 2 WNV *positive* mosquito pools were found in 2002 and 2003.

In 2004, the Health Department will not be regularly collecting or testing birds for WNV. The State recently issued a screening policy which states that the State Public Health laboratory will not do dead bird testing for WNV for the current year. North Carolina recognizes that the virus is readily found in resident bird populations throughout the State, including Mecklenburg County. The Health Department plans to increase its *mosquito* pooling and testing for WNV in 2004. In 2003, the county tested more than 300 mosquito pools (a pool contains anywhere from 1-50 specimens of the same species) for WNV and hopes to double that number in 2004.

For more information about WNV or mosquito control contact Dennis Salmen at salmeda@co.mecklenburg.nc.us or 704.336.5554.